

AMENDMENTS TO THE CLAIMS

LISTING OF CLAIMS

1. (Currently Amended) A stator plate for a stator segment assembly of a stator of an electric machine comprising:
 - an outer rim section of said stator plate for said stator segment assembly that includes a radially inner surface;
 - a tooth section of said stator plate for said stator segment assembly extending radially inwardly from said outer rim section; and
 - a first undercut portion of said stator plate for said stator segment assembly that is formed in said radially inner surface of said outer rim section and that receives winding wire.
2. (Currently Amended) The stator plate of claim 1 wherein said first undercut portion is located adjacent to ~~said tooth section~~ a junction between said tooth section and said radially inner surface.
3. (Previously Amended) The stator plate of claim 1 wherein said first undercut portion increases slot area and allows additional winding wire to be wound around said tooth section.
4. (Original) The stator plate of claim 1 wherein said first undercut portion provides clearance for a start turn of winding wire on said stator segment.

5. (Original) The stator plate of claim 1 wherein said first undercut portion is generally "U"-shaped.

6. (Original) The stator plate of claim 1 wherein said stator is formed by a plurality of stator plates.

7. (Currently Amended) A stator segment assembly for a stator of an electric machine comprising:

a circumferentially-segmented stator core including a stack of stator plates, each of said stator plates including an outer rim section, a tooth section extending radially inwardly from said outer rim section, a radially inner surface of said outer rim section that is generally perpendicular to said tooth section, and a first undercut portion that is formed in said radially inner surface of said outer rim section adjacent to a junction between said radially inner surface and said tooth section and that receives winding wire.

8. (Original) The stator segment assembly of claim 7 further comprising:

a first end cap attached to a face surface of said stack and having a radially outer section, a middle section extending radially inwardly from a center portion of said radially outer section, and an inner section connected to said middle section, wherein a radially inner surface of said outer section is generally perpendicular to sides of said middle section, and wherein said radially inner surface of said radially outer

section includes a third undercut portion that is adjacent to said center portion of said radially outer section.

9. (Original) The stator segment assembly of claim 7 further comprising:
first and second end caps that are located adjacent opposite face surfaces of said stack, wherein said first and second end caps include third and fourth undercut portions that register with said first undercut portion of said stack.
10. (Original) The stator segment assembly of claim 9 further comprising:
windings that are wound around said first and second end caps and said stack.
11. (Original) The stator segment assembly of claim 10 further comprising:
an insulating material that is located between said windings and said stack.
12. (Original) The stator segment assembly of claim 7 further comprising:
a tongue formed in one circumferential end of said outer rim section and a groove formed in an opposite circumferential end of said outer rim section.
13. (Original) The stator segment assembly of claim 12 wherein said tongue and said groove are "V"-shaped.

14. (Original) The stator segment assembly of claim 12 wherein said tongue and said groove are "C"-shaped.
15. (Original) The stator segment assembly of claim 7 wherein said electric machine is a brushless permanent magnet motor.
16. (Original) The stator segment assembly of claim 7 wherein said electric machine is a switched reluctance motor.
17. (Original) The stator segment of claim 7 further comprising:
a second undercut portion in said radially inner surface of said outer rim section.
18. (Original) The stator segment of claim 17 wherein said first undercut portion provides sufficient clearance for a plurality of winding turns.
19. (Currently Amended) A stator segment assembly for circumferentially-segmented stator of an electric machine comprising:
a stack of stator plates for said circumferentially-segmented stator that are generally "T"-shaped and include an outer rim section, a tooth section that extends radially inwardly from a center portion of said outer rim section, a radially inner surface of said outer rim section that is generally perpendicular to said tooth section, and a first

undercut portion in said radially inner surface of said outer rim section that is adjacent to said center portion, ~~and~~ that is generally "U"-shaped, and that receives winding wire.

20. (Original) The stator segment assembly of claim 19 further comprising:

an end cap that is generally "T"-shaped and includes an outer section, a middle section extending inwardly from a center portion of said outer section, and an inner section, wherein a radially inner surface of said outer section of said end cap is generally perpendicular to sides of said middle section, and wherein a second undercut portion is formed in said radially inner surface of said outer section and is adjacent to said center portion of said outer section.

21. (Original) The stator segment assembly of claim 19 further comprising:

first and second insulating end caps that are attached to opposite face surfaces of said stack.

22. (Original) The stator segment assembly of claim 21 further comprising:

windings that are wound around said first and second end caps and said stack; and

an insulating material that is located between said windings and said stack.

23-26 (Withdrawn)

27. (New) The stator segment assembly of claim 2 wherein said radially inner surface is perpendicular to said tooth section.